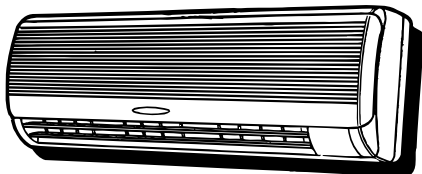


# SHARP SERVICE MANUAL

S8862AHM098E/



## MULTI SPLIT SYSTEM ROOM AIR CONDITIONERS

INDOOR UNIT  
**MODEL AH-M098E**  
 (2 INITS)  
 OUTDOOR UNIT  
**AU-M188E**

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified should be used.

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## SPECIFICATIONS

ITEMS			INDOOR UNIT	OUTDOOR UNIT
			AH-M098E	AU-M188E
Cooling capacity	kW		[1Unit] 2.5, [2Unit] 2.4 x 2	
Moisture removal	Liters/h		1.2 x 2	
★ Electrical data				
Phase	-		Single	
Rated frequency	Hz		50	
Rated voltage range	V		198 to 264	
Rated voltage	V		220 - 240	
Rated current	A		[1Unit] 4.1 - 4.1, [2Unit] 7.6 - 7.5	
Rated input	W		[1Unit] 890 - 950, [2Unit] 1650 - 1760	
Power factor	%		[1Unit] 99 - 97, [2Unit] 99 - 98	
Compressor	Type		Hermetically sealed rotary type	
	Model		2PS154D3AA01	
	Oil charge		270cc (SUNISO 4GDID)	
Refrigerant system	Evaporator		Louver fin and Grooved tube type(7mm tube)	
	Condenser		Fin and Grooved tube type	
	Control		Capillary tube	
	Refrigerant volume		750 g x 2	
Capillary tube size	Outer dia. mm		-	2.7
	Inner dia. mm		-	1.5
	Lenght mm		-	700
	Q'ty		-	2
Noise level	High	dB(A)	37	53 - 54
	Med.	dB(A)	33	-
	Low	dB(A)	29	-
Fan system				
Drive			Direct drive	Direct drive
Air flow quantity	High	m3(cft)/min.	6.8	42
	Med.	m3(cft)/min.	5.7	-
	Low	m3(cft)/min.	4.8	-
Fan			Cross flow fan	Propeller fan
Connections				
Refrigerant coupling			Flare type	
Refrigerant tube size Gas, Liquid			3/8", 1/4"	
Refrigerant pipe sets No.			AZ-24T5F; 5m(16.4ft), AZ-24T7E;7m(23ft)	
Drain piping mm(Inches)			O.D ø 18(45/64)	
Others				
Safety device			Compressor: Overload protector(MRA98963-9201)	
			Fan motors: Thermal fuse	Thermal Protector
			Fuse, Micro computer control	
Air filters			Polypropylene net (Washable)	
Net dimensions	Width	mm(Inches)	790(31-3/32)	890(35-1/16)
	Height	mm(Inches)	270(10-5/8)	637(25-5/64)
	Depth	mm(Inches)	150(5-15/16)	297(11-11/16)
Net weight		kg	7	56

Note: The condition of (★) marked item are 'IEC 335-1'.

# EXTERNAL DIMENSIONS

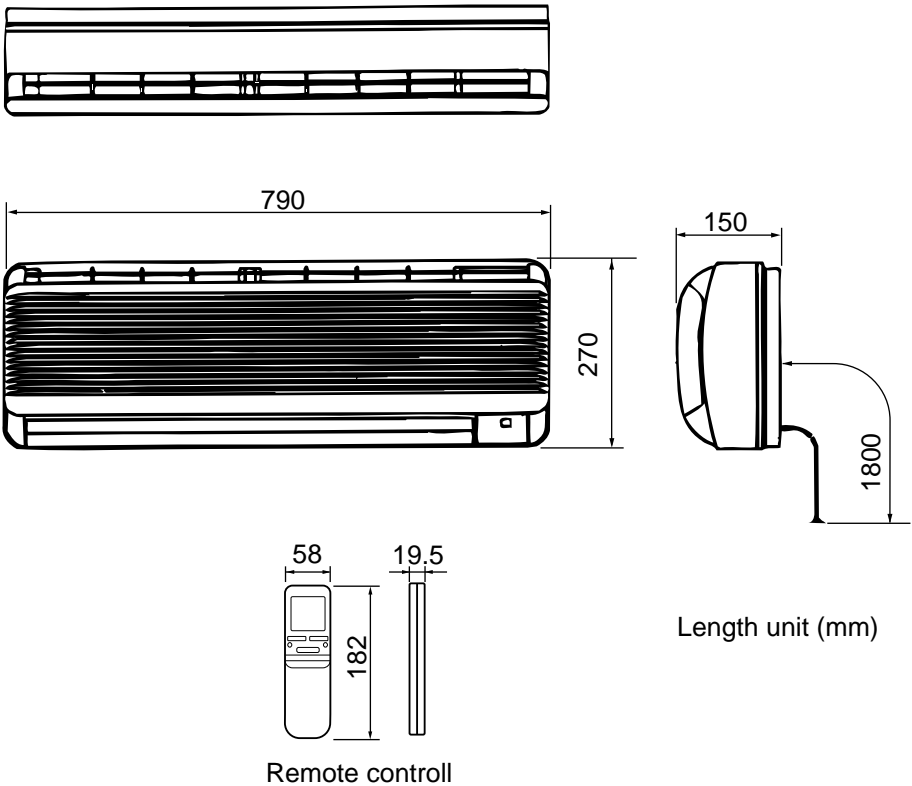


Figure E-1. INDOOR UNIT

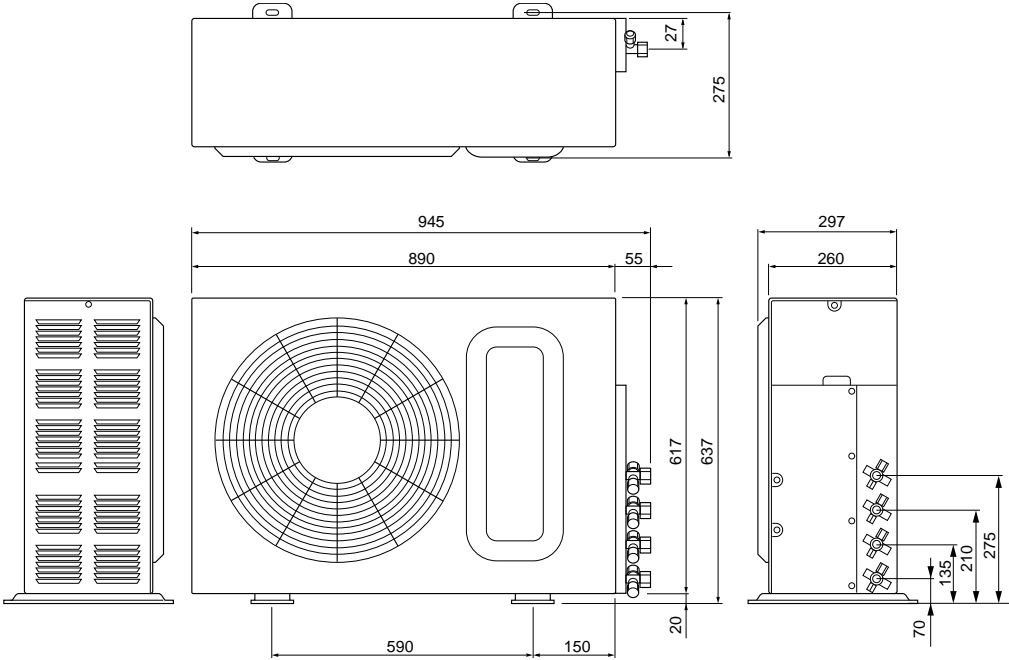


Figure E-2. OUTDOOR UNIT

## WIRING DIAGRAMS

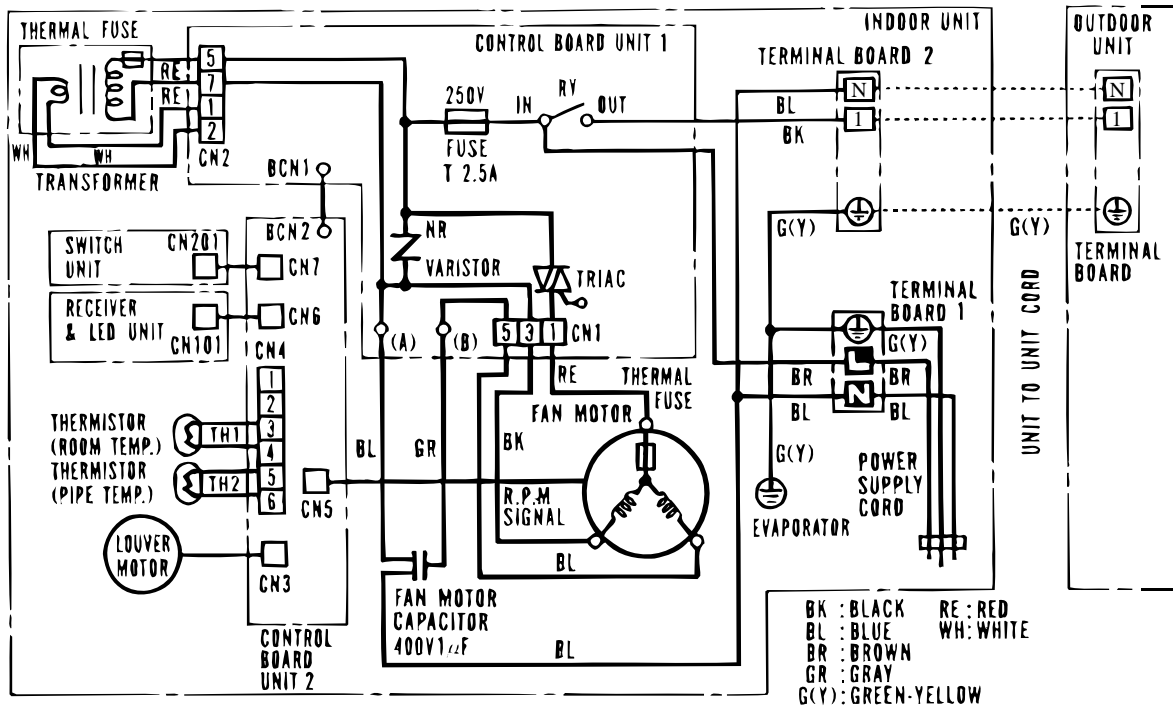


Figure W-1. Wiring Diagram for AH-M098E

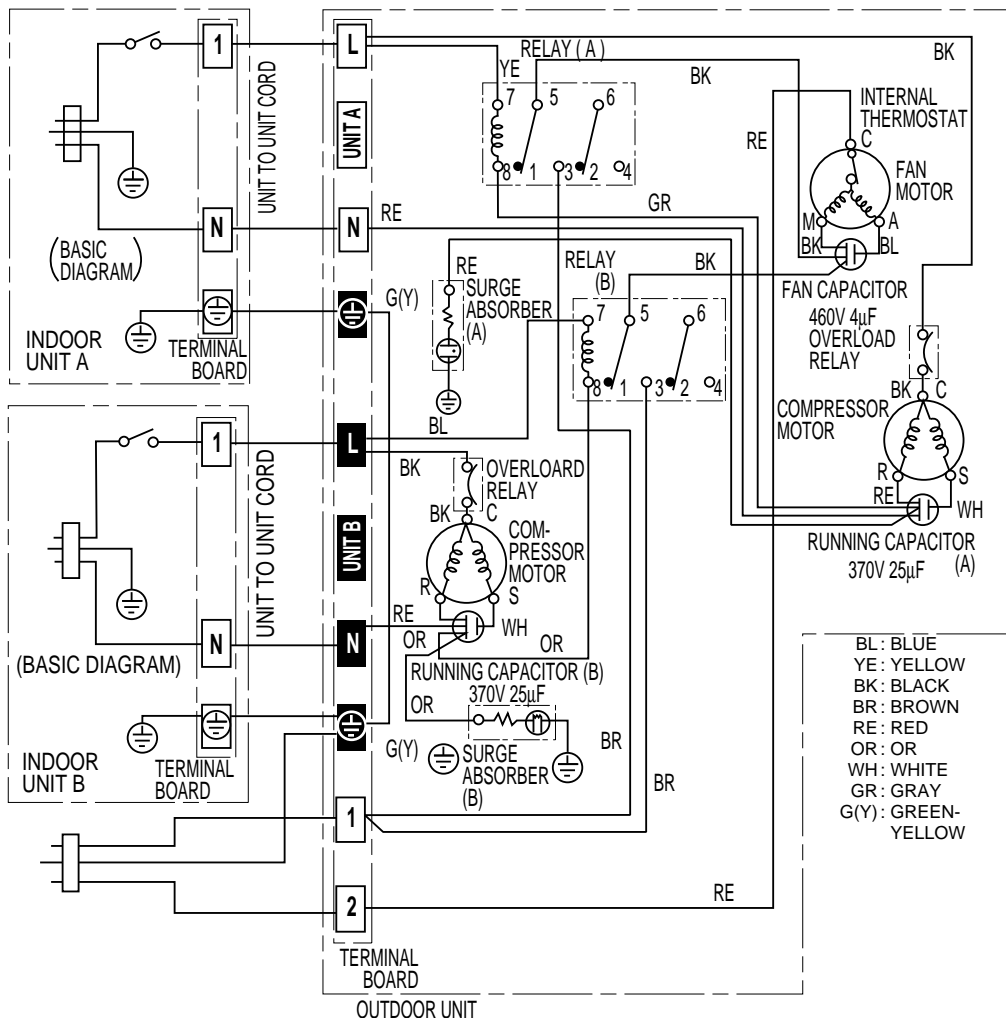


Figure W-2. Wiring Diagram for AU-M188E

## ELECTRICAL PARTS

### For Model AH-M098E and AU-M188E

DESCRIPTION	MODEL	REMARKS	SITE
Compressor	2PS154D3AA01	220 - 240V, 50Hz, 700W	AU
Indoor fan motor	ML-A411	220 - 240V, 50Hz	AH
Outdoor fan motor	ML-A457	220 - 240V, 50Hz	AU
Indoor fan motor capacitor	-	400V, 1 $\mu$ F	AH
Outdoor fan motor capacitor	-	460V, 4 $\mu$ F	AU
Running capacitor	-	370V, 25 $\mu$ F	AU
Transformer	-	Primary; AC 220V, 50Hz Secondary; AC16.1V, 50Hz	AH
Fuse	-	250V, 2.5A	AH

## MICROCOMPUTER CONTROL SYSTEM

Figure L-1. Electronic Control Circuit Diagram

**Figure L-2 -1. Printed Wiring**

**Figure L-2-2. Printed Wiring Board of Receiver & LED Unit**

**Figure L-2-3. Printed Wiring Board of Switch Unit**



## MICROCOMPUTER CONTROL SYSTEM

### 1. Temperature control characteristic

#### 1-1 Operation COOL

In the mode "COOL", the thermostat circuit is controlled by four thermostat lines (C1 ~ C4).

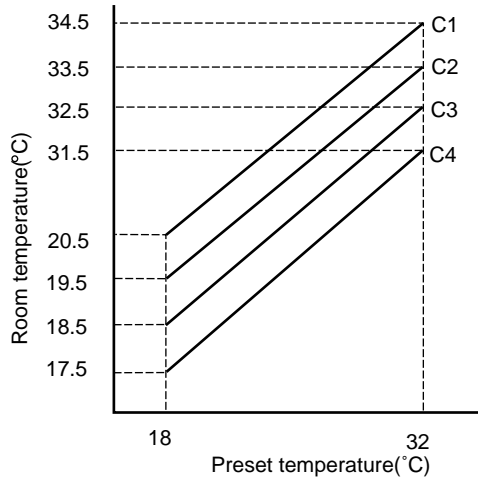


Figure H-1

#### 1-2 Operation DRY

In the mode "DRY", the thermostat circuit is controlled by three thermostat lines (D1 ~ D3).

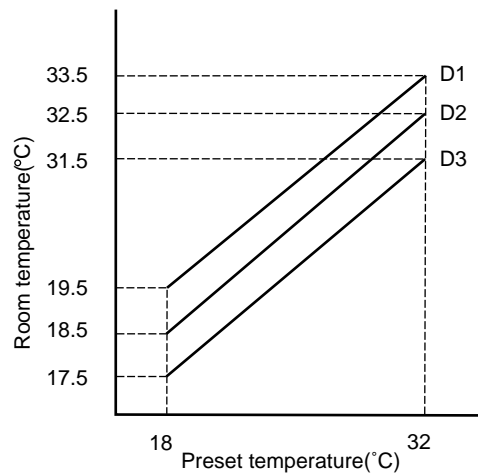


Figure H-2

### 2. Operation modes

#### 2-1 Operation COOL

The compressor turns on or off, at the thermostat lines C3 and C4. The outdoor fan motor is also controlled with the compressor.

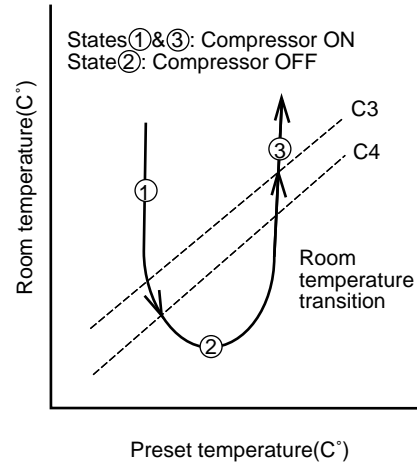


Figure H-3

#### 2-2 Operation DRY

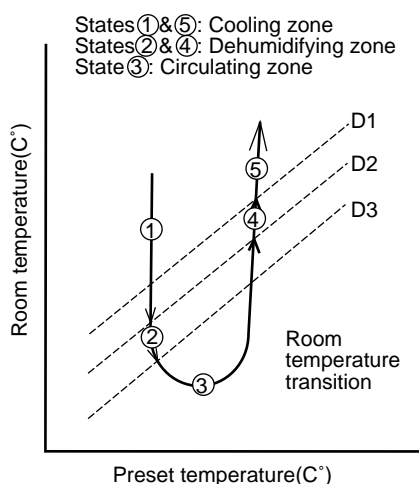
On the switch on, the compressor always starts to operate for 2 minutes with fan speed "D" (slower than "UL").

The microcomputer reads the room temperature 2 minutes after this first compressor operation. This room temperature is set as the preset temperature automatically.

The preset temperature ranges from 18°C to 32°C.

When the room temperature is below 18°C, the preset temperature is set to 18°C, and when the room temperature is over 32°C, the preset temperature is set to 32°C.

Dry operation is divided into three zones (Cooling zone, Dehumidifying zone and Circulating zone) by thermostat lines (D1 to D3), and the compressor and the fan motor are controlled in each zone as shown in Table H-1.



**Figure H-4**

**Table H-1**

Speed		Compressor Fan
Cooling zone	ON	"UL"
Dehumidifying zone	ON	"D"
Circulating zone	OFF	"D" or OFF

#### 2-3 Operation FAN ONLY

The indoor fan motor always turns on.

### 3. FAN speed

Fan speeds are given by the indoor fan motor, "M" (fastest), "L", and "UL", which are available in the following operation mode.

**Table H-2**

FAN Switch	COOL	FAN ONLY
HIGH	M	M
LOW	L	L
SOFT	UL	UL

### 4. Freeze preventive

When the indoor pipe temperature falls below  $-1^{\circ}\text{C}$  during cool operation or dry operation, the compressor is stopped.

### 5. Test run

If the "TEST RUN" button in the unit is pushed during suspension of operation, cool test operation starts.

At this time, the fan speed is set to "AUTO". If this button is pushed during operation, the test operation starts in current operation mode.

The operation LED (red) flickers during test run.

In the mode cool continuous (compressor ON) operation is performed. In the mode dry operation or in the operation dehumidifying zone. In the fan only mode the indoor fan only mode the indoor fan motor runs continuously.

## 6. Timer

### 6-1 24-HOURS PROGRAMMABLE ON/OFF TIMER

ON-TIMER or OFF-TIMER can be independently programmed.

The unit operates at the preset temperature during one hour after the OFF-time is set, and then preset temperature is automatically shifted up (+1°C in cool operation and dry operation). When the ON-timer is set in cool operation, operation starts before 0 to 30 minutes (depends on the room temperature), so that preset temperature is obtained at set time.

### 6-2 ONE-HOUR TIMER

When ONE-HOUR TIMER is set, the unit turns off automatically after one hour. The ONE-HOUR TIMER operation has priority over other time operation, such as the TIMER ON and TIMER OFF. If the button One-HOUR TIMER is pressed again during operation, the unit will operate additionally for another one hour.

## 7. Automatic air conditioning

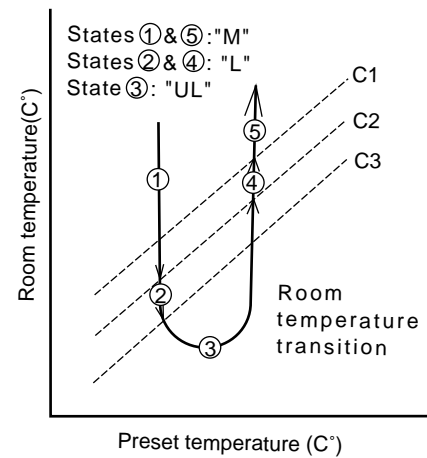
When automatic air conditioning is selected, the operation mode and preset temperature are set automatically according to the room temperature on starting operation.

**Table H-3**

Room temperature of operation start	Operation Mode	Preset temperature.
Above 28°C	COOL	26°C
26 to 28°C		25°C
24 to 26°C		24°C
Below 24°C	DRY	Room temperature at operation start

## 8. Automatic fan speed control

If the automatic fan speed is selected in cool operation, the fan speed is automatically changed according to the thermostat line C1 C2, and C3.



**Figure H-5**

## 9. Outputs at each operation mode

**Table H-4**

		Compressor	Outdoor Fan motor	Indoor Fan motor
COOL	Cooling	ON	ON	ON
	Circulating	OFF	OFF	ON
DRY	Cooling	ON	ON	L/UL
	Dehumidifying	ON	ON	UL/D
	Circulating	OFF	OFF	D/OFF
FAN ONLY		OFF	OFF	ON

## 10. Power on start

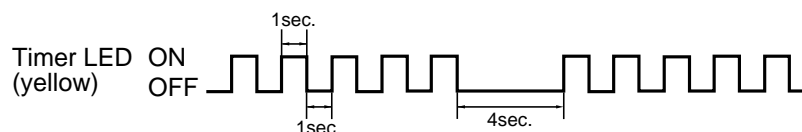
If the connecting wire "Power ON" (JP8) is cut on the PWB ass'y, when the power is supplied by turning on a circuit breaker, the air conditioner automatically starts of operation in "AUTO".

## 11. AUTO restart

If the connecting wire "MEMORY" (JP9) is cut, and on IC6 is soldered on the PWB ass'y, and power failure occurs during operation, the unit will restart in the same operation mode, after power recovery.

## 12. Trouble suspension

When indoor fan motor is out of order or compressor-lock occurs, the compressor, indoor fan motor, outdoor fan motor, and louver are all stopped and the operation LED(red) turns off and the timer LED(yellow) turns on or off as follows.



## 13. Test mode

### 13-1 TEST 1 (For control circuit operation checking)

Make terminals 1 and 2 of connector CN4 short-circuited and supply the power.

Hereby the timer's period becomes shortened.

In this test mode, the control times are shortened as follows.

The operation LED flicker's period:	} not shortened
in Test run :	
The protector timer:	
The protector timer:	
Other controls:	1/60(ex.: 3 min. to 3 sec.)

### 13-2 TEST 2 (For output of each operation checking)

Keep pushing both the buttons, "AUX." and : "TEST RUN" and supply the power, the system will go to the test 2 mode.

In this mode, the output of operation is switched by pushing the button "TEST RUN" on the unit or the button "O/I" on the remote controller.

Use the button "AUX." to back to step 1.

Normal outputs are shown in Table H-5, H-6.

Table H-5

Step	Output for outdoor unit	Lamps		Indoor Fan motor	Louver
		RED	YELLOW		
1	OFF	※ 1	※ 2	OFF	OPEN
2	ON	Flickering	ON	D	OFF
3	OFF	ON	OFF	M	OFF
4	OFF	ON	ON	L	CLOSE
5	OFF	ON	OFF	D	OFF
6	OFF	ON	ON	UL	OFF
7	OFF	OFF	ON ※3	(ON)	OFF
8	OFF	ON	ON	M	OFF
9	OFF	ON	ON	L	OFF
10	OFF	ON ※ 4	OFF※4	OFF	OFF
11	OFF	ON	OFF	OFF	OFF
12	OFF	ON	OFF	OFF	OFF
13	OFF	ON	OFF	OFF	OFF
14	OFF	ON	ON	OFF	OFF
15	OFF	ON	ON	OFF	OFF
16	OFF	ON	OFF	OFF	OFF
17	OFF	OFF	ON	OFF	OFF
18	OFF	OFF	ON	OFF	OFF
19	OFF	OFF	ON	OFF	OFF
20	OFF	ON	ON	OFF	OFF
(Back to step 1)					

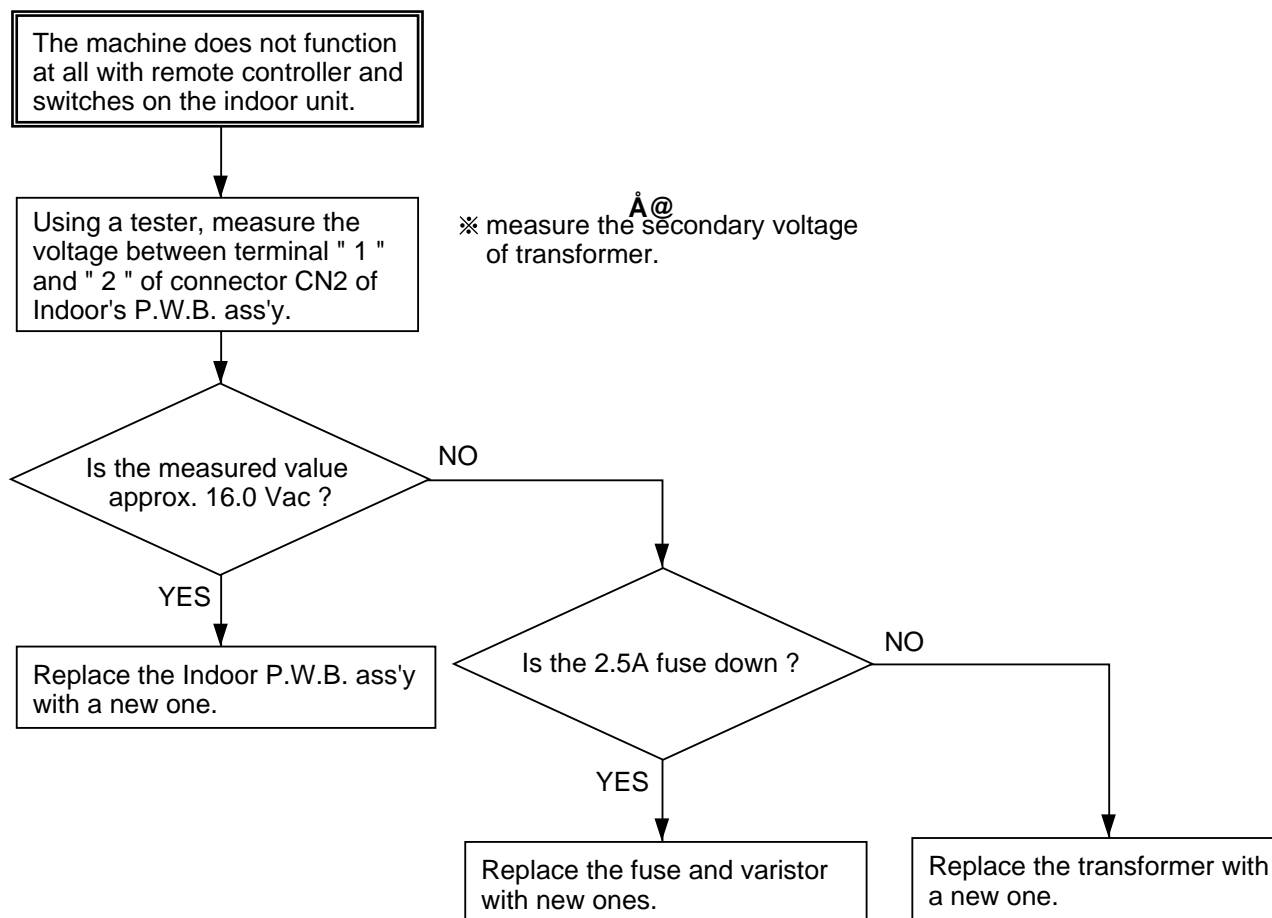
※ 1 :  $7^{\circ}\text{C} \leq \text{Room temp.} < 42^{\circ}\text{C}$  ..... ON  
       :  $7^{\circ}\text{C} > (\text{Room temp.}) \text{ or } (\text{Room temp.}) \geq 42^{\circ}\text{C}$  ..... OFF

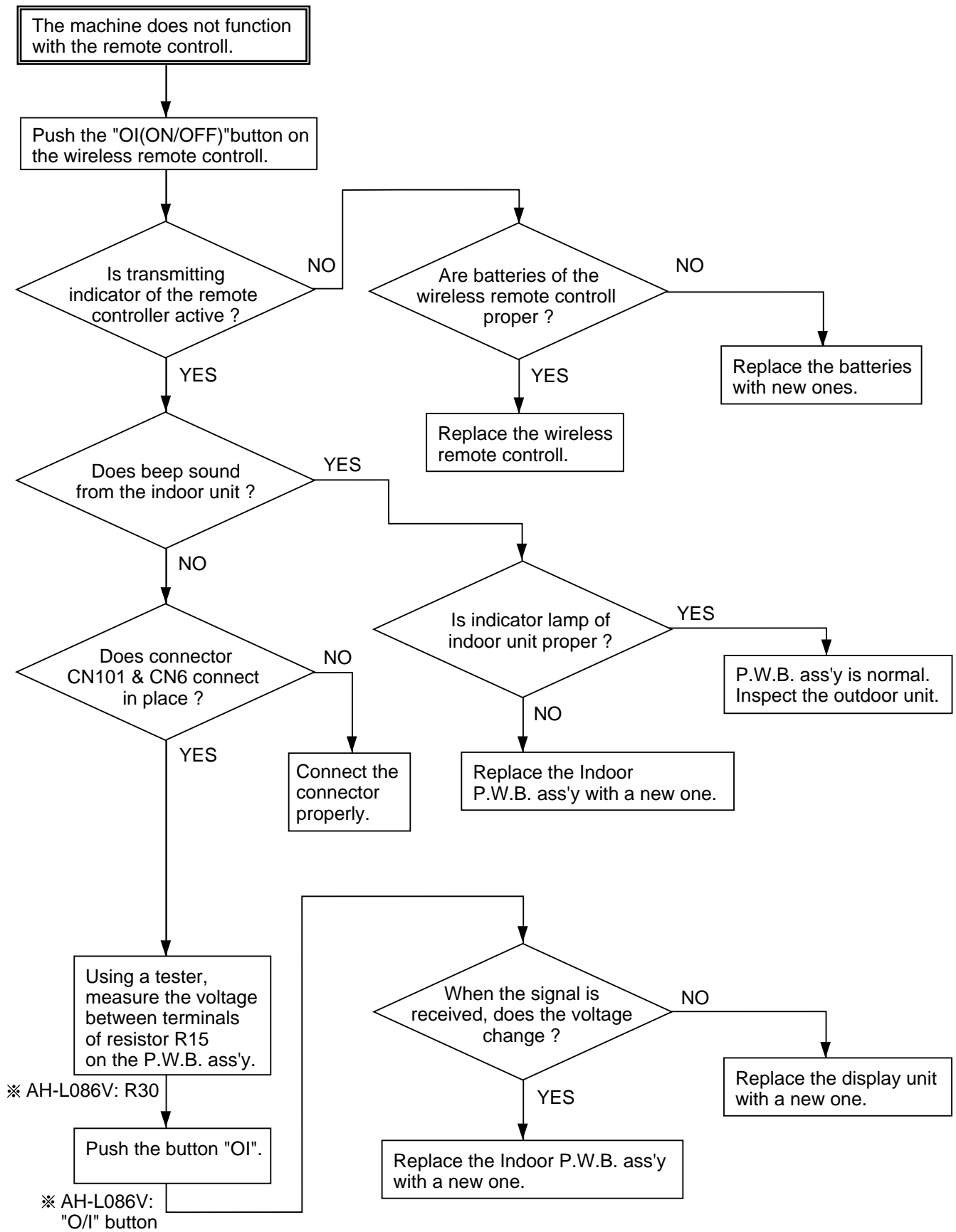
※ 2 :  $-2^{\circ}\text{C} \leq \text{Pipe temp.} < 42^{\circ}\text{C}$  ..... ON  
       :  $-2^{\circ}\text{C} > (\text{Pipe temp.}) \text{ or } (\text{Pipe temp.}) \geq 42^{\circ}\text{C}$  ..... OFF

※ 3 : When the Power on start is effective, timer LED (yellow) is OFF.

※ 4 : When Auto Restart is effective, Operation LED (red) is OFF, and timer LED (yellow) is ON.

## TROUBLESHOOTING OF A CONTROL CIRCUIT





CHARACTERISTIC OF TH1 & TH2

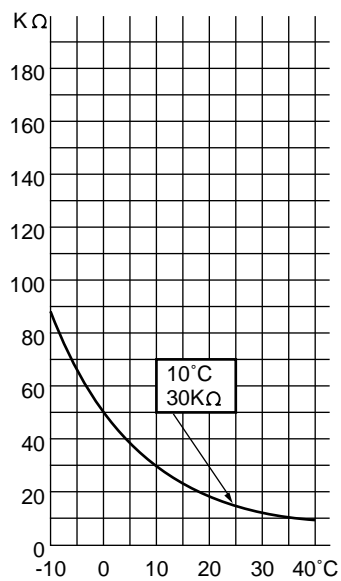
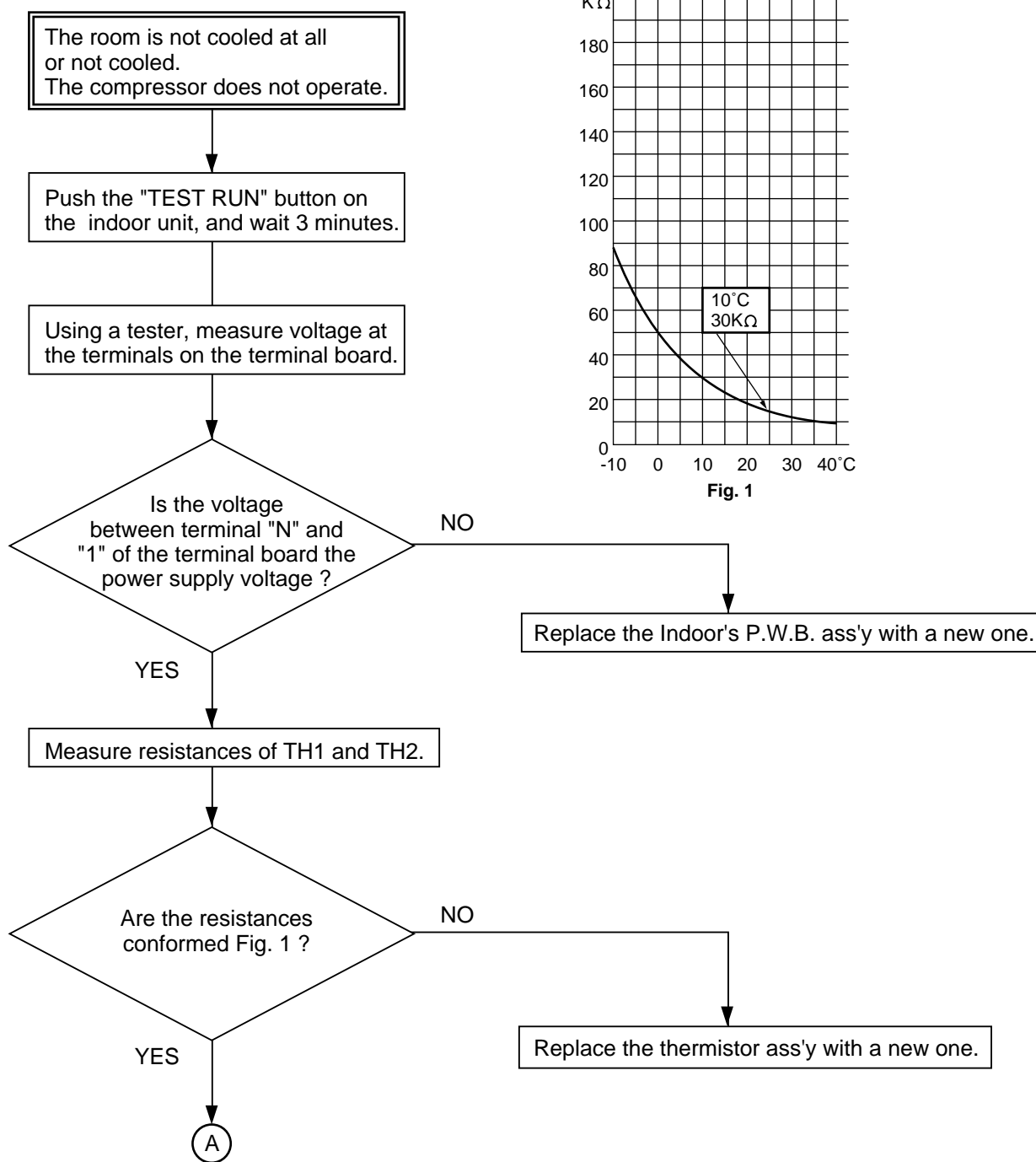


Fig. 1





## REFRIGERATION CYCLE

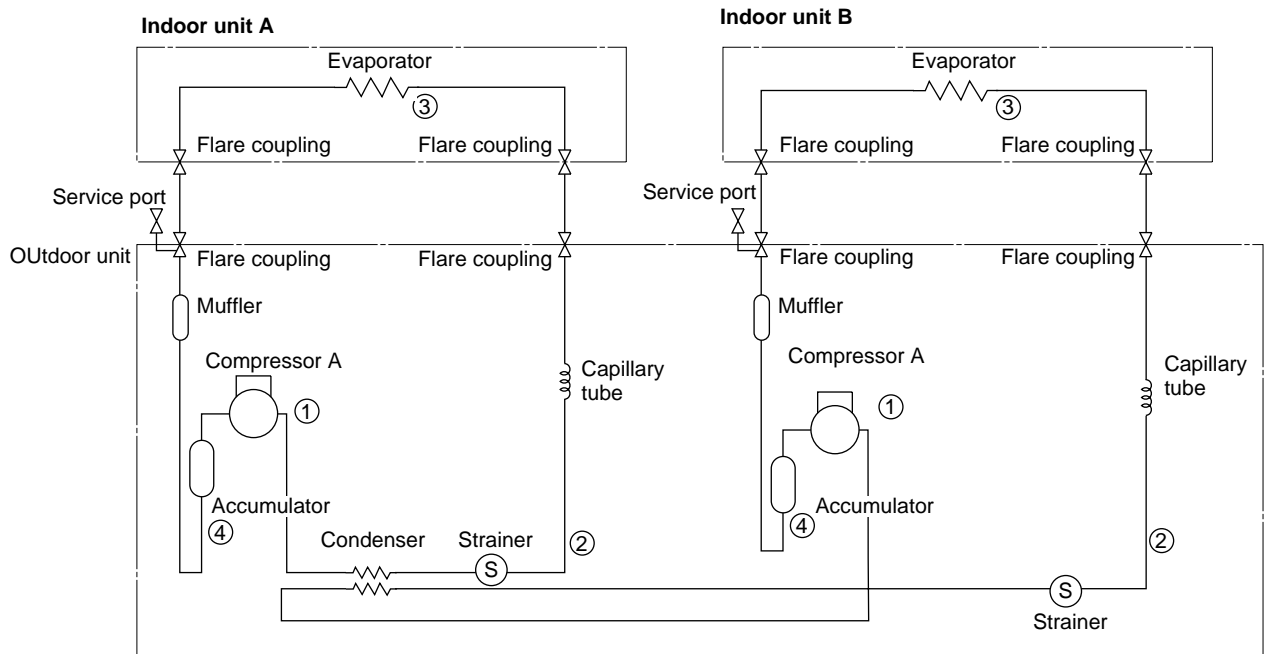
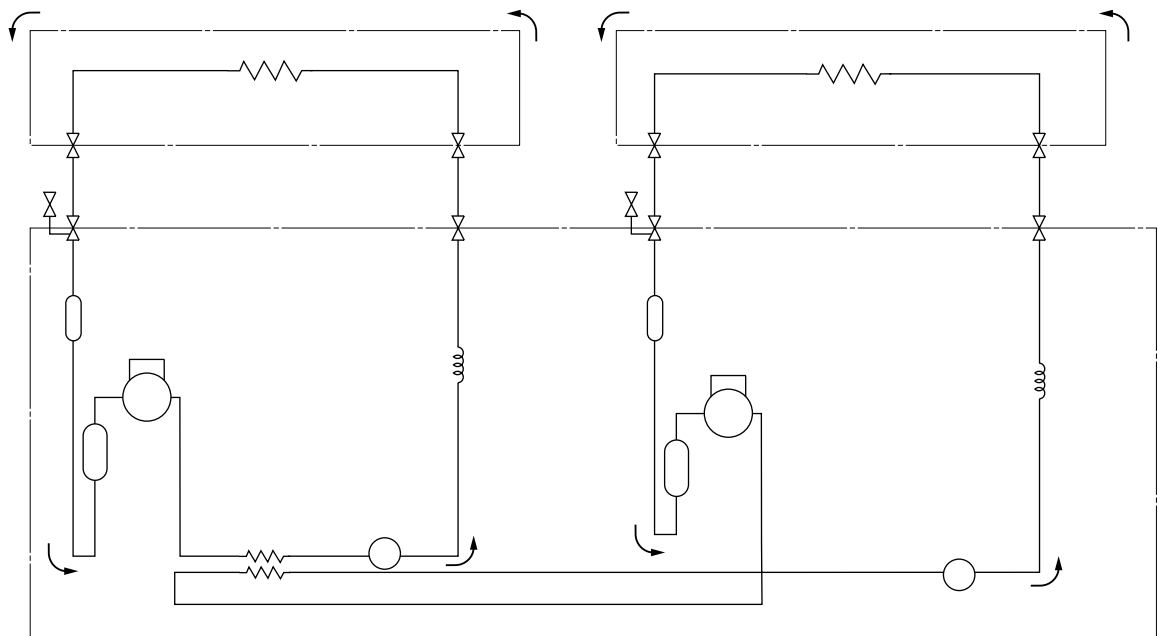


Figure R-1. Refrigeration Cycle



At Cooling

Figure R-2. Flow of Refrigerant

## Cycle temperature and service port pressure

(ISO Cooling)

	Cooling	
	1 unit running	2 unit running
①	73°C	71°C
②	42°C	41°C
③	12°C	12°C
④	7°C	6°C
※ Service port pressure	0.50MPa	0.50MPa

※ …… Gauge pressure

## ISO Cooling and Heatpump condition

	Indoor side		Outdoor side	
	Temperature (°C)	Relative humidity (%)	Temperature (°C)	Relative humidity (%)
Cooling	27	47	35	40

## Dimension of Capillary tube

	O.D.	I.D.	L
Capillary tube	ø 2.7	ø 1.5	700

# PERFORMMANCE CURVES

Indoor air temp. : 27°C  
Indoor humidity : 47RH%  
Indoor fan speed : Hi  
Power source : 1Ø 220V, 50Hz

Indoor air temp. : 27°C  
Indoor humidity : 47RH%  
Indoor fan speed : Hi  
Power source : 1Ø 220V, 50Hz

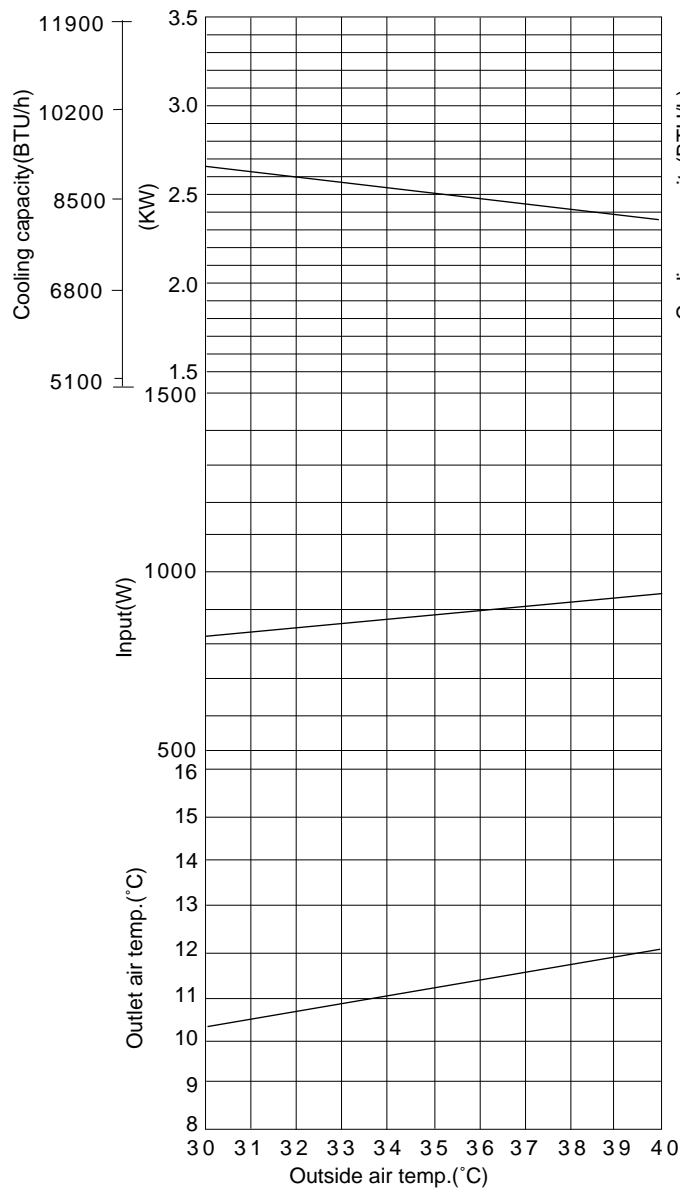
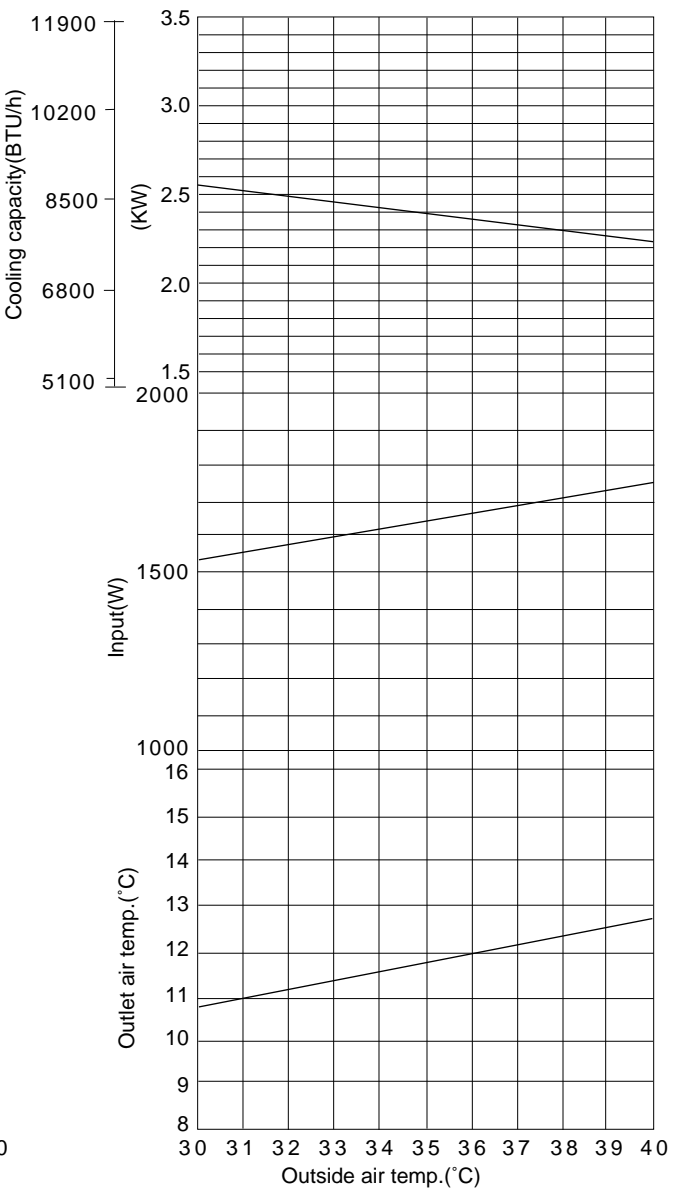


Figure P-1. At Cooling for AH-M098E  
(1 Unit running)



※ Cooling capacity per 1 unit

Figure P-1. At Cooling for AH-M098E  
(2 Unit running)

## REFRIGERANT PIPE INSTALLATION WORKS

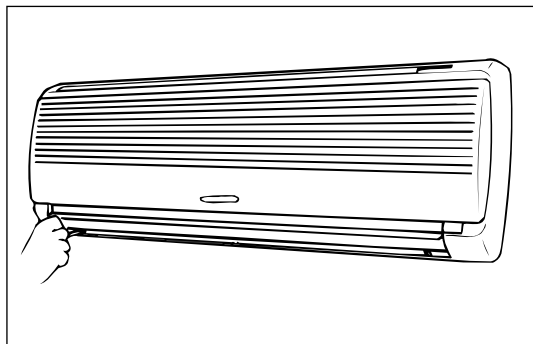
Refrigerant pipe length and level difference between the indoor and outdoor units.

PIPE SIZE		STANDARD PEERMISSIBLE LENGHT	PEERMISSIBLE LEVEL DIFFERENCE
GAS	LIQUID		
3/8"	1/4"	7m (23.0ft)	5m (16.4ft)

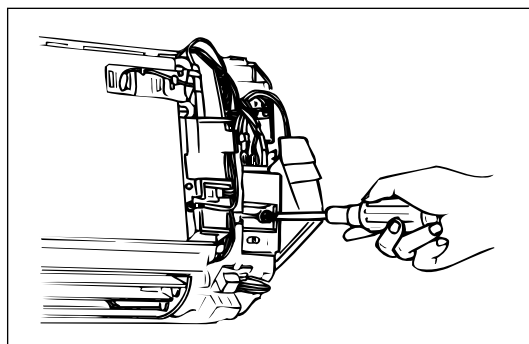
The shorter the refrigerant pipe, the higher the machine capability. Keep the pipe as short as possible.

## DISASSEMBLING PROCEDURE FOR INDOOR UNIT MODEL AH-M098E

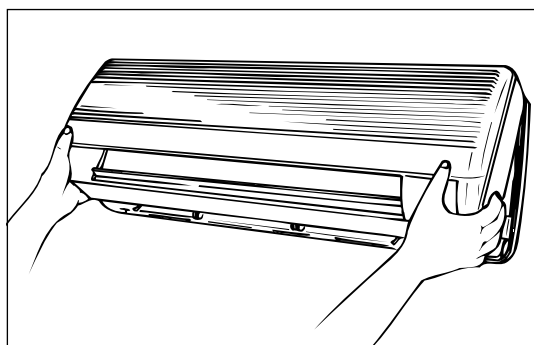
**CAUTION: DISCONNECT THE UNIT FROM THE POWER SUPPLY BEFORE ANY SERVICING**



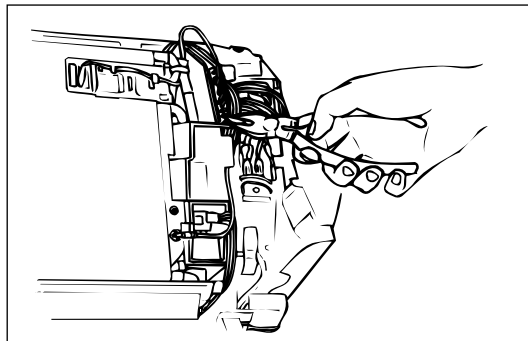
1. Set the vertical adjustment louver horizontally and open the panel.  
Loose fixed 3 screws.



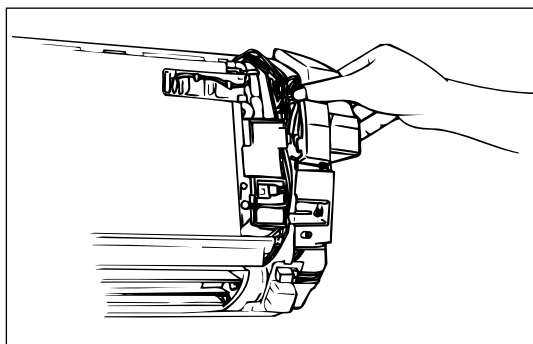
4. Loosen a screw and take out the cord holder.



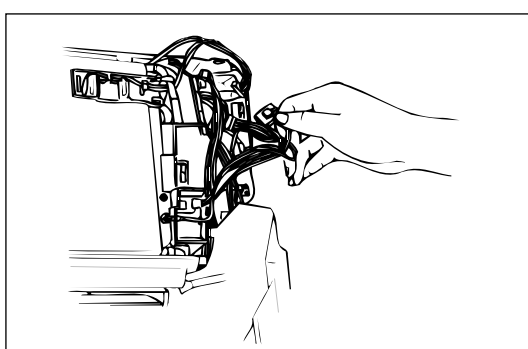
2. Take out the front panel ass'y.



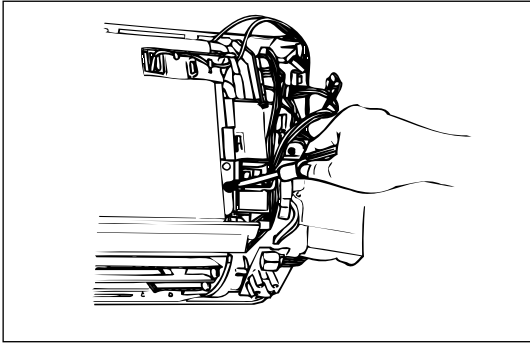
5. Cut the nylon band.



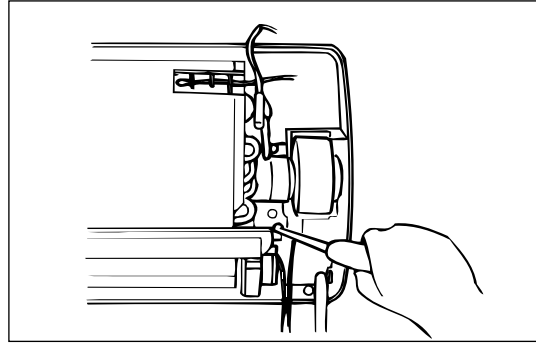
3. Take out the control cover.



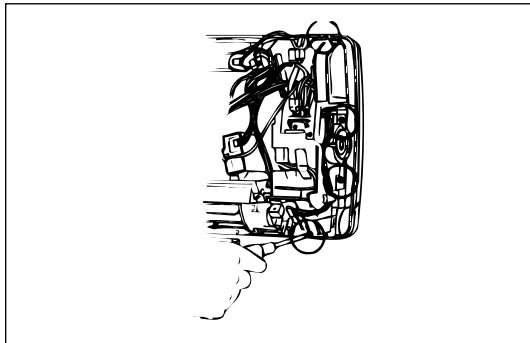
6. Disconnect fan motor connectors and others.



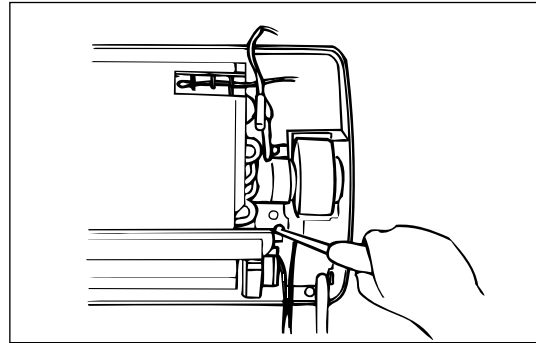
7. Loosen the earth screw.



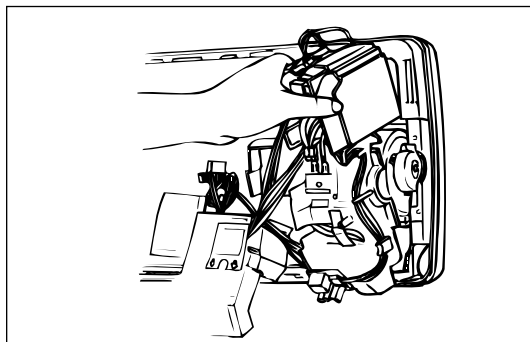
10. Loosen a screw fixing drain cover and take it out.



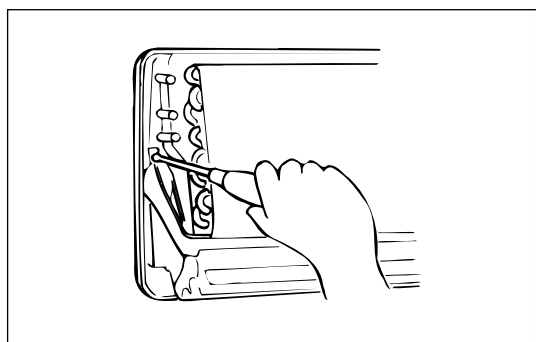
8. Loosen 4 screws fixing control box.



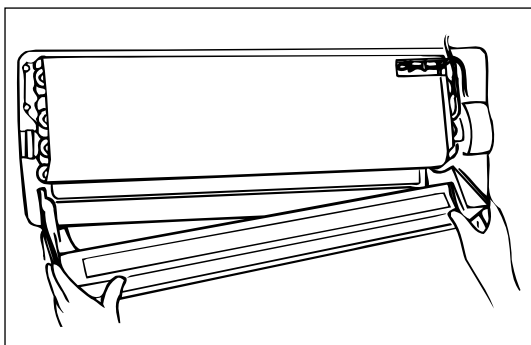
11. Loosen a screw fixing drain pan ass'y. (Right side)



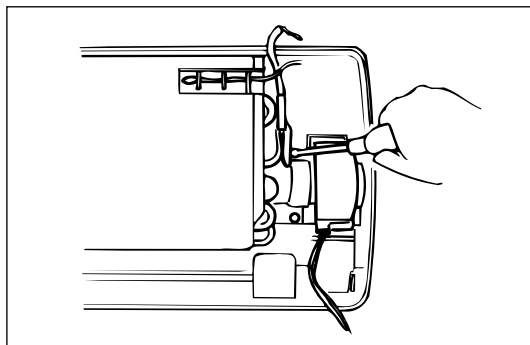
9. Take out the control box ass'y.



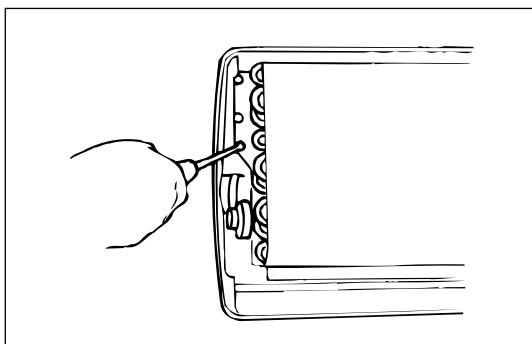
12. Loosen 2 screws fixing drain pan ass'y. (Left side)



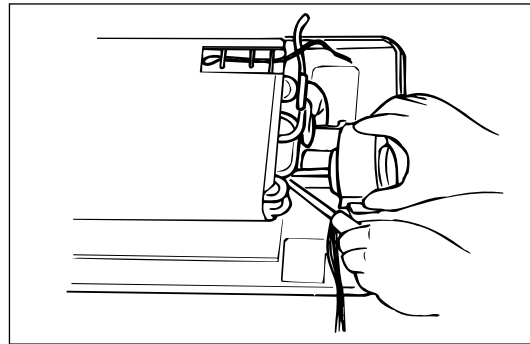
13. Take out the drain pan ass'y.



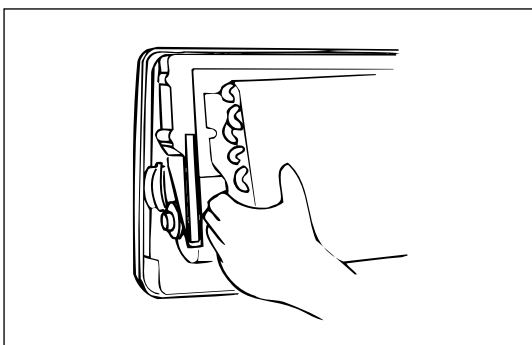
16. Loosen 2 screws fixing fan motor holder, and take out fan motor and cross flow fan.



14. Loosen 2 screws fixing evaporator.



17. Loosen a screw connecting cross flow fan to fan motor.



15. Lift up the evaporator.

## OUTDOOR UNIT

**CAUTION:DISCONNECT THE UNIT FROM THE POWER SUPPLY BEFORE ANY SERVICING**

1. Remove the screw holding the left side plate and pull it out.
2. Remove the one screw holding the control cover to the cabinet and pull it out.
3. Loosen the screw holding the right side plate.
4. Remove the another screw holding the right side plate and pull it out.
5. Remove the screws holding the left and right side of the cabinet.
6. Lift up and remove the cabinet.
7. Remove the one nut holding the fan to the fan motor shaft, now the fan is free.
8. Remove the three screws holding the fan motor to the motor stay angle, now the fan motor is free.

NOTE: Number shown in following figure are the removal order.

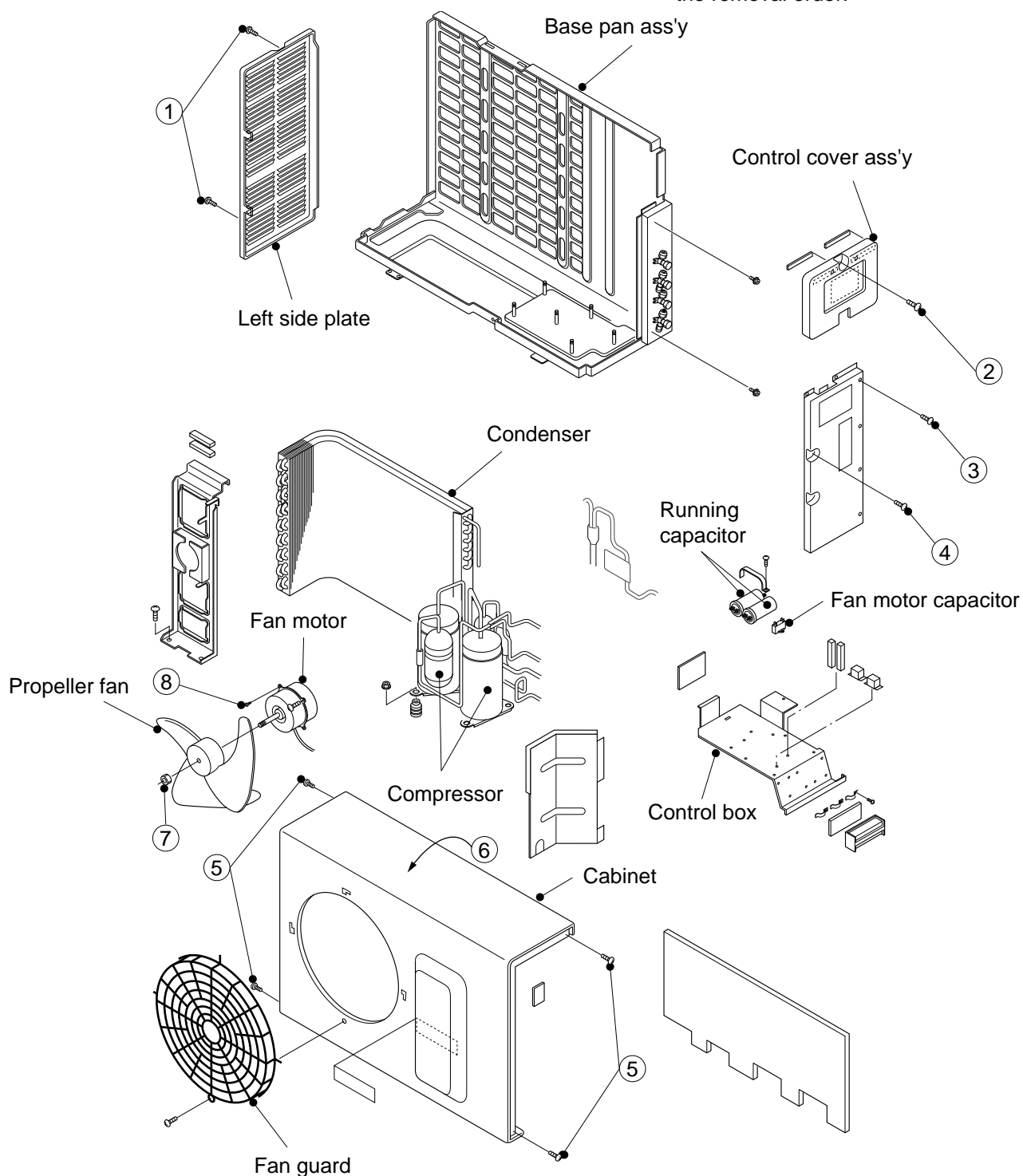


Figure D-2. OUTDOOR UNIT MODEL AU-M188E



## REPLACEMENT PARTS LIST [AH-M098E]

REF. NO.	PART NO.	DESCRIPTION	Q'TY	CODE
<b>CABINET AND UNIT PARTS</b>				
1- 1	CMOT-A221JBK0	Fan motor sub assembly	1	BM
1- 2	NFANCA042JBE0	Cross flow fan	1	BC
1- 3	CSRA-A352JBK0	Drain pan assembly	1	BH
1- 4	MJNTPA040JBFB	Louver link	3	AC
1- 5	MLOV-A135JBFB	Horizontal adjustment louver A (Vertical louver A)	9	AB
1- 6	MLOV-A136JBFB	Horizontal adjustment louver B (Vertical louver B)	3	AB
1- 7	MLOV-A133JBFB	Vertical adjustment louver A (Horizontal louver A)	1	AH
1- 8	MLOV-A134JBFB	Vertical adjustment louver B (Horizontal louver B)	1	AH
1- 9	PPACGA002JBE0	O ring	1	AA
1-10	RMOT-A050JBE0	Louver motor	1	AY
1-12	LHLD-A197JBFG	Louver holder	4	AB
1-15	CHLD-A053JBK0	Bearing assembly	1	AD
1-19	DCHS-A203JBK0	Cabinet assembly	1	AZ
1-20	DWAK-A641JBK0	Panel assembly	1	AY
1-21	PFILMA077JBFA	Air filter	2	AP
1-22	HDEC-A623JBFA	Display cover	1	AM
1-23	HBDG-A059JBFA	Badge	1	AF
1-25	MARMPA012JBFA	Open panel hinge L	1	AD
1-26	MARMPA013JBFA	Open panel hinge R	1	AD
1-32	TSPEC-C831JBFA	Name label	1	AE
1-33	PGUMSA046JBE0	Damper rubber	1	AD
1-34	CPNL-A084JBK0	Open panel assembly	1	AV
1-36	PHOS-A015JBE0	Drain hose	1	AL
1-37	LHLD-A204JBFA	Motor holder	1	AE
1-38	PGUMMA071JBE0	Motor cushion	1	AN
1-39	PGUMMA086JBE0	Motor cushion	1	AG
1-40	PCOV-A190JBE0	Drain cover	1	AE
1-41	LHLD-A187JBFA	Tube holder	1	AD
1-42	PSHE-A099JBE0	Evaporator sheet	1	AH
1-43	LSPR-A006JBE0	Sheet spring for fixing evaporator seat	2	AB
1-44	LHLD-A209JBFA	Front panel hinge R	1	AF
1-45	LHLD-A208JBFA	Front panel hinge L	1	AD
1-46	PBOX-A120JBK0	Louver gear assembly	1	AZ
1-47	NBRG-A010JBFB	Louver bushing	2	AA
1-48	PSHE-A098JBE0	Evaporator seal	1	AC
1-49	TLABPA175JBR0	Louver seal	1	AB
<b>CONTROL BOX PARTS</b>				
2- 1	FPWBFA015JBK0	Display board unit	1	AW
2- 2	FPWBFA013JBK0	Switch board unit	1	AM
2- 3	QTAN-A127JBE0	Terminal board (3P)	1	AN
2- 4	QTAN-A126JBE0	Terminal board (3P)	1	AN
2- 5	DPWBFA013JBK0	Control board unit	1	BS
2- 7	QACC-A153JBE0	Power supply cord	1	AT
2- 8	RTRN-A182JBE0	Transformer	1	AY
2- 9	RC-HZA195JBE0	Fan motor capacitor	1	AL
2-10	RTHM-A136JBE0	Thermistor	1	AN
2-11	LHLD-A190JBFA	Thermistor holder	1	AG
2-12	PBOX-A149JBFA	Control box	1	AN
2-13	HPNLCA497JBFA	Control box cover	1	AF
2-14	HPNLCA548JBE0	Control panel	1	AG
2-15	LHLD-A266JBFA	Cord holder	1	AE
2-16	LHLD-A265JBFA	Cord clamp	1	AC
2-17	TLABCA654JBR0	Wiring diagram	1	AB
2-18	PSHE-A076JBE0	Protection cover	1	AE
2-19	PGUMMA095JBE0	Wire cushion	1	AA
2-20	PCOV-A191JBE0	LED holder	1	AD
2-21	RH-IXA252JBE0	Microcomputer (IC1)	1	AW
2-22	RIH-IZA025JBE0	Integrated circuit (IC3)	1	AE
2-23	VHIIR2411// -6	Integrated circuit (IC4)	1	AE
2-24	RH-SZA007JBE0	Triac	1	AK
2-25	RH-PZA017JBE0	Photo triac	1	AK
2-26	RRLYJA032JBE0	Relay (RY)	1	AU
2-27	VHIPST591D/-3	Integrated circuit (IC5)	1	AE
2-28	RFIL-A042JBE0	Coil (L)	1	AM
2-29	RH-VZ0002JBE0	Varistor (NR)	1	AE
2-30	RH-IZA119JBE0	Integrated circuit (IC2)	1	AD
2-31	RC-QZA096JBE0	Capacitor (C1)	1	AE
2-32	RR-KZA083JBE0	Resistor array (RA2)	1	AC
2-33	RR-KZA054JBE0	Resistor array (RA1)	1	AB

REF. NO.	PART NO.	DESCRIPTION	Q'TY	CODE
2-34	RMPTEA031JBE0	Capacitor array (CA1, CA2)	2	AE
2-35	RMPTEA025JBE0	Resistor cap array (RCM)	1	AD
2-36	RCRS-A032JBE0	Ceramic oscillator (OSC)	1	AD
2-37	QFS-AA013JBE0	Fuse 250V 2.5A	1	AC

#### CYCLE PARTS

3- 1	CPIPCA297JBK0	Pipe assembly	1	BE
3- 2	PEVA-A244JBE0	Evaporator	1	BS

#### ACCESSORY PARTS

4- 1	LX-NZ0247JBE0	Wall plug, fixing Mounting plate	7	AB
4- 2	XTTSD45P30000	Screw for Wall plug	6	AA
4- 3	CRMC-A469JBE0	Wireless remote controller	1	BH
4- 4	LX-BZA106JBE0	Special screw	1	AD
4- 6	TINSEA209JBR0	Operation manual	1	BA
4- 7	PPLTNA022JBP0	Mounting plate	1	AL
4- 9	FCOV-A013JBFA	Screw cover	2	AB
4-10	LPFT-A022JBF0	Drain joint	1	AD

#### SCREWS AND RING

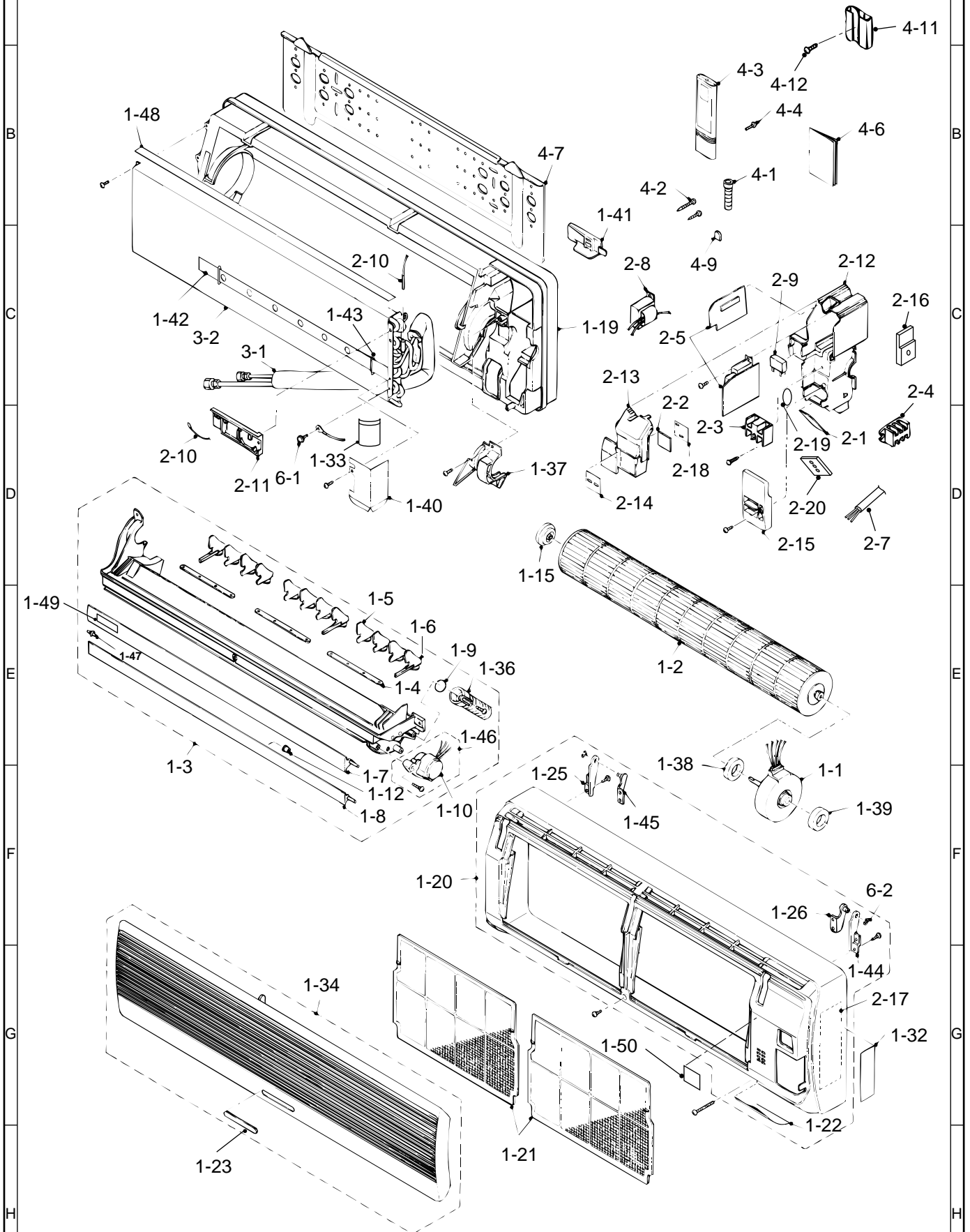
6- 1	LX-BZA075JBE0	Special screw	1	AA
6- 2	XREUW50-06000	Ring	2	AA

#### HOW TO ORDER REPLACEMENT PARTS

To have your order filled promptly and correctly, please furnish the following information.

- |                 |                |
|-----------------|----------------|
| 1. MODEL NUMBER | 2. REF. NO.    |
| 3. PART NO.     | 4. DESCRIPTION |

# INDOOR UNIT FOR MODEL AH-M098E



## REPLACEMENT PARTS LIST [AU-M188E]

REF. NO.	PART NO.	DESCRIPTION	Q'TY	CODE
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### CABINET AND UNIT PARTS

1- 1	LSUB-A012JBPO	Motor stay sub angle	2	AG
1- 2	CMOTLA457JBE0	Fan motor	1	BT
1- 3	NFANPA037JBFA	Propeller fan	1	AZ
1- 4	LANGKA043JBPO	Motor stay angle	1	AV
1- 5	PSKR-A101JBPO	Bulkhead	1	AQ
1- 6	GPLTMA051JBTA	Right side plate	1	AW
1- 7	CFTA-A216JBK0	Control cover assembly	1	AQ
1- 8	GPLTMA047JBTA	Left side plate	1	AR
1- 9	GCAB-A124JBTA	Cabinet	1	BD
1-10	GGADFA028JBEA	Fan guard	1	AZ
1-12	PSPF-A672JBE0	Sound proof cover	1	AU
1-14	TSPC-C836JBR0	Name plate	1	AE
1-15	TLABBA100JBRA	SHARP label	1	AE
1-16	CCHS-A511JBTA	Base pan ass'y	1	BG
1-17	TLAB-B317JBR0	Unit label	1	AE

### CONTROL BOX PARTS

2- 1	RHOG-A093JBE0	Overload relay	2	AN
2- 2	CW-VZA281JBK0	Compressor cord ass'y (for compressor A)	1	AT
2- 3	CW-VZA282JBK0	Compressor cord ass'y (for compressor B)	1	AU
2- 4	RC-HZA316JBE0	Running capacitor	2	AY
2- 6	QTAN-A068JBE0	Terminal board	1	AG
2- 8	LHLD-0227JBM0	Cord clamp	3	AC
2- 9	LBNDKA017JBPO	Running capacitor band	1	AC
2-10	TLABCB105JBR0	Wiring diagram	1	AD
2-18	RC-HZA220JBE0	Fan motor capacitor	1	AQ
2-26	RH-VZA018JBE0	Surge absorber	2	AQ
2-29	RRLY-A003JBE0	Relay	2	AV

### CYCLE PARTS

3- 1	PCMPRA106JBE0	Compressor	2	CE
3- 2	PCON-A397JBPO	Condenser	1	CG
3- 3	DVLV-A271JBK0	2 Way valve assembly (Liquid side)	2	BF
3- 4	PSEN-A004JBK0	Flare nut assembly	2	AE
3- 7	DVLV-A272JBK0	3 Way valve assembly (Gas side)	2	BF
3- 8	PSEN-A005JBK0	Flare nut assembly	2	AG
3- 9	LX-NZA034JBE0	Service cap	2	AD
3-11	PCPY-A614JB10	Capillary tube	2	AL
3-13	PSRN-A056JBE0	Strainer	2	AM
3-14	GLEG-A073JBE0	Compressor cushion rubber	6	AF
3-15	MSPR-A005JBE0	OL spring	2	AB
3-16	LX-NZA028JBE0	Compressor nut	6	AB
3-17	PSEL-A006JBE0	Gasket terminal	2	AC
3-18	PCOV-A002JBE0	Terminal cover	2	AF
3-19	LX-NZA051JBE0	Terminal cover nut	2	AH
3-22	PGUMS0193JBE0	Butyl rubber sheet A	2	AD

### ACCESSORY PARTS

4- 1	TINS-A535JBR0	Installation manual	1	AF
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### SCREWS, NUT AND BOLT

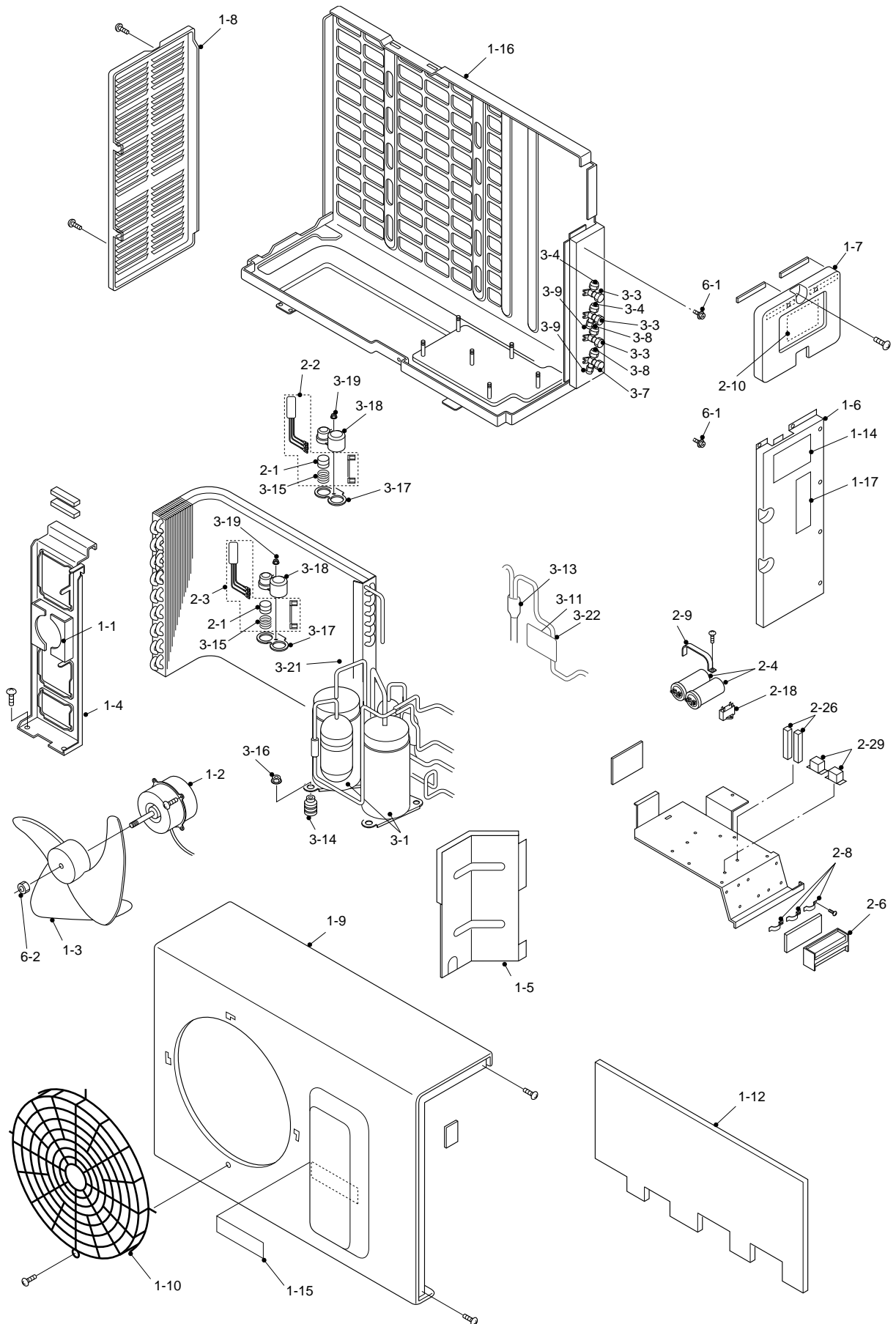
6- 1	LX-BZA078JBE0	Valve set bolt	8	AF
6- 2	LX-NZ0128JBE0	Fan set nut	1	AB

### HOW TO ORDER REPLACEMENT PARTS

To have your order filled promptly and correctly, please furnish the following information.

- |                 |                |
|-----------------|----------------|
| 1. MODEL NUMBER | 2. REF. NO.    |
| 3. PART NO.     | 4. DESCRIPTION |

# OUTDOOR UNIT FOR MODEL AU-M188E







# SHARP